

An electrochemical gas sensor is proposed for determining the concentration of oxidizable gas components which has an electrochemical measuring cell (13) having a measuring electrode (18) and a reference electrode (19). Measuring electrode (18) is made of a material which is not able, or not completely able to catalyze the establishment of gas equilibrium. In addition to the electrochemical measuring cell (13), at least one electrochemical pumping cell (12), having at least one inner pumping electrode (17), is provided, which, together with measuring electrode (18), is positioned in a measuring gas compartment (22). Oxygen is pumped into or out of measuring gas compartment (22) by pumping cell (12), the partial pressure of oxygen in measuring gas compartment (22) being set to a lambda value of ≥ 1.3.

20 (Figure)